



Rocks

Shale

Type:

Sedimentary; clastic.

Texture/Appearance:

Very fine-grained (clay to silt-sized particles) grains not distinguishable to the naked eye. A relatively soft rock with fine laminae; may display carbonaceous material or fossils.

Color:

Variable, but commonly light to dark gray; sometimes black, tan, red, or green.

Mineralogy/Chemistry:

Composed of various clay minerals with fine grains of quartz, feldspars, and mica often present. May also contain carbon residue, iron oxides, and pyrite. Specific shale varieties may be described as *argillaceous*, *carbonaceous*, *ferruginous*, *bituminous*, or *oil* among others.

Occurrence/Use:

Worldwide distribution; occurring in lacustrine, lagoonal, and marine deposits with other sedimentary rocks, and typically where fine sediments have been transported, sorted, and settled in water over time. Some varieties may be used in manufacture of brick, tile, ceramics, or cement. Oil- and uranium-bearing shales are also potential energy sources.